REMARKS

This is a full and timely response to the outstanding non-final Office Action mailed November 6, 2006. Through this response, claims 1, 5, 11-13, 22-25, 34-37, and 46-47 have been amended, and claims 30-32 and 42-44 have been canceled without prejudice, waiver, or disclaimer. Reconsideration and allowance of the application and pending claims 1, 3-13, 15-28, 33-40, and 45-47 are respectfully requested.

I. Oath/Declaration

The Office Action alleges that Applicants have not given a post office address in the application paper as filed, and requests a statement over Applicants' signature providing a complete post office address. Applicants respectfully note that this request was complied with in the last response, and Applicants have included a copy of the declaration with post office address filed in the last response.

II. Allowable Subject Matter

Applicants appreciate the Examiner's indication that claims 1 and 13 would be allowable if amended to overcome the rejections under 35 U.S.C. § 112, and further that claims 3-12, 15-24, 32, and 44 would be allowable if amended to overcome the rejections under 35 U.S.C. § 112 and rewritten to include all of the limitations of the base claim and any intervening claims.

In that it is believed that every rejection has been overcome or rendered moot, it is respectfully submitted that each of the claims that remains in the case is presently in condition for allowance.

III. Claim Rejections - 35 U.S.C. § 112, Second Paragraph

A. Statement of the Rejection

Claims 1, 3-13, 15-28, 30-40, and 42-47 have been rejected under 35 U.S.C. § 112, second paragraph, as being allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as the invention. In particular, the Office Action asserts that "substantially" is a relative term that allegedly renders the claim indefinite. Applicants respectfully disagree.

Applicant notes that the Court of Appeals for the Federal Circuit (the "Federal Circuit") has held on multiple occasions that relative terms are not *per se* improper. For instance, in *Andrew Corp. v. Gabriel Electronics, Inc.*, 847 F.2d 819, 6 USPQ2d 2010 (Fed. Cir. 1988), *cert. denied*, 488 U.S. 927 (1988), the Court commented that such words are "ubiquitous in patent claims. Such usages, when serving reasonably to describe the claimed subject-matter to those of skill in the field of the invention, and to distinguish the claimed subject matter from the prior art, have been accepted in patent examination and upheld by the courts." *Id.*, 847 F.2d at 821, 6 USPQ2d at 2012. Instead of disregarding relative terms, such terms should be interpreted in light of the specification to determine the literal coverage of the claim. *See Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988), *cert. denied*, 488 U.S. 825 (1988).

Further support for the proposition that relative terms are not by definition indefinite may be found in the following cases: *Rosemont, Inc. v. Beckman Instruments, Inc.*, 727 F.2d 1540 (Fed. Cir. 1984)(held that relative terminology was not indefinite even though the terminology was not precisely defined in the specification); *U.S. v. Telectronics*, 857 F.2d 778 (Fed. Cir. 1988)(held that relative terminology was not indefinite because the Patent Act only requires "reasonable precision" in delineating the bounds of the claimed invention); *Modine Mfg. Co. v. U.S. Int'l Trade Comm'n*, 75 F.3d

1545, (Fed. Cir. 1996)(held that qualitative terms without numerical limits were not indefinite); *Ecolab v. Envirochem, Inc.*, 264 F.3d 1358 (Fed. Cir. 2001)(stated that it is common to use relative terms to avoid a strict numerical boundary and that relative terms must construed using the same rules of construction as any other claim term).

That relative terms are not *per se* improper is also supported by the Manual of Patent Examining Procedure (MPEP). As provided in MPEP § 2173.05(b) entitled "Relative Terminology," the MPEP states:

> The fact that claim language, including terms of degree, may not be precise, does not automatically render the claim indefinite under 35 U.S.C. 112, second paragraph. *Seattle Box Co., v. Industrial Crating and Packing, Inc.*, 731 F.2d 818, 221 USPQ 568 (Fed. Cir. 1984). Acceptability of the claim language depends upon whether one of ordinary skill in the art would understand what is claimed, in light of the specification.

In the present case, "substantially" is being used in a manner that one skilled in the art can easily recognize, in the context of Applicants' disclosure, what is being claimed. Accordingly, it is respectfully asserted that claims 1, 3-13, 15-28, 30-40, and 42-47 define embodiments of the invention in the manner required by 35 U.S.C. § 112. Accordingly, Applicants respectfully request that the rejections to these claims be withdrawn.

IV. Claim Rejections - 35 U.S.C. § 102(e)

A. Statement of the Rejection

Claims 25-28, 30-31, 33-40, 42-43, and 45-47 have been rejected under 35 U.S.C. § 102(e) as allegedly anticipated by *Keating et al.* ("Keating," U.S. Pat. No. 5,867,068). Applicants respectfully submit that independent claims 25 and 37 have been amended to incorporate features deemed allowable by the Office Action, and hence it is believed that the rejection has been rendered moot as to independent claims 25 and 37 and the

respective dependent claims that incorporate the allowable claim features through dependency on the allowable independent claims.

In addition, Applicants respectfully note that *Wong* is used as a secondary reference in some of the rejections, which suggests that the rejection may have been intended under 35 U.S.C. 103, although it is not clear. In the sense that an Official Notice was taken on page 5 as it pertains to claim 36, Applicants respectfully submit that such a rejection is improper under 35 U.S.C. 102, and further submit that if a 103 rejection was intended, Applicants traverse such a taking of Official Notice since the reasoning provided does not include specific factual findings predicated on sound technical and scientific reasoning to support such conclusions. In addition, Applicants respectfully submit that such a taking of Official Notice is rendered moot in view of the amendments incorporating allowable claim features.

V. Canceled Claims

As identified above, claims 30-32 and 42-44 have been canceled from the application through this Response without prejudice, waiver, or disclaimer. Applicants reserve the right to present these canceled claims, or variants thereof, in continuing applications to be filed subsequently.

CONCLUSION

Applicants respectfully submit that Applicants' pending claims are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully submitted,

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